

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
10 November 2005 (10.11.2005)

PCT

(10) International Publication Number  
**WO 2005/106185 A1**

(51) International Patent Classification?: **E21B 19/07**,  
19/10

(21) International Application Number:  
PCT/GB2004/050001

(22) International Filing Date: 16 August 2004 (16.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/567,235 1 May 2004 (01.05.2004) US

(71) Applicants (for all designated States except US): **VARCO I/P, INC.** [US/US]; One Briarlake Plaza, 2000 West Sam Houston Parkway South, Suite 1700, Houston, TX 77042 (US). **LUCAS, Brian, Ronald** [GB/GB]; Lucas & Co., 135 Westhall Road, Warlingham, Surrey CR6 9HJ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SONNEVELD, Leon** [NL/NL]; van Eijckstraat 1c, NL-4793 AN Fijnaart (NL). **KRIJNEN, Anton** [NL/NL]; Markdijk 5, NL-4792

SJ Klundert (NL). **DE PONT, Bob** [NL/NL]; Dudokstraat 16, NL-5103 MS Dongen (NL). **SCHATS, Mike** [NL/NL]; Boschdijk 376, NL-5622 PB Eindhoven (NL). **DE LAAT, Kees** [NL/NL]; Boegspriet 10, NL-4871 DW Etten-Leur (NL). **VAN RIJZINGEN, Hans** [NL/NL]; Slijperijhof 49, NL-4902 DH Oosterhout (NL).

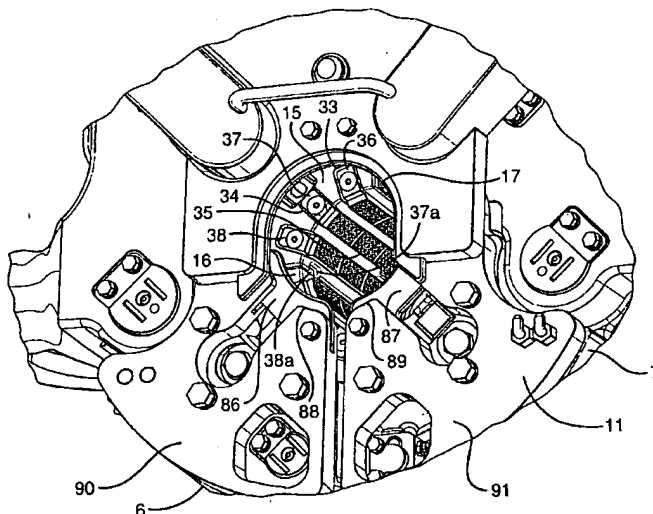
(74) Agent: **LUCAS, Phillip, Brian**; Lucas & Co., 135 Westhall Road, Warlingham, Surrey CR6 9HJ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR HANDLING PIPE



(57) Abstract: An apparatus and method for handling pipe, the apparatus comprising a body (2, 6, 7) having a tapered surface (11, 13, 14) and at least a first slip (15, 17) and a second slip (16, 18) slidable on the tapered surface (11, 13, 14), the apparatus further comprising a slip actuator (40, 41) for setting said at least first slip (15, 17) and said second slip (16, 18) characterised in that said first slip (15, 17) and said second slip (16, 18) have interengaging elements (37a, 38a) therebetween such that upon actuation of said slip actuator (40, 41), said first slip (15, 17) is set and said second slip (16, 18) is set by the interengaging elements (37a, 38a) transferring the setting force from the slip actuator (40, 41) through said first slip (15, 17) to said second slip (16, 18).

WO 2005/106185 A1



FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*